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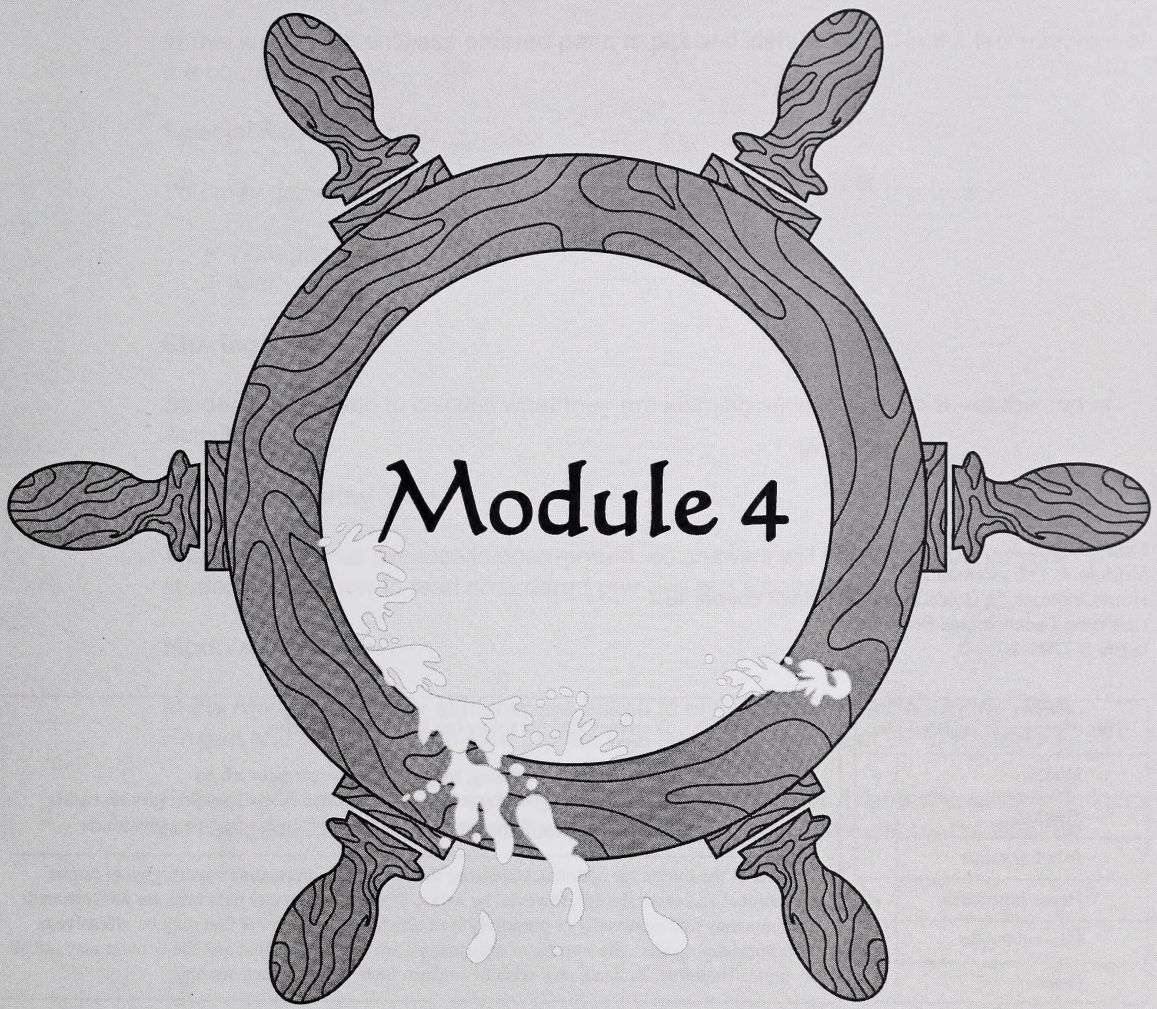
Mathematics 5



Home Instructor's Guide and Assignment Booklet 4B

Learning Technologies Branch

Alberta LEARNING

Mathematics 5
Module 4: Transformations
Home Instructor's Guide and Assignment Booklet 4B
Learning Technologies Branch
ISBN 0-7741-2032-0

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	

You may find the following Internet sites useful:

- Alberta Learning, **http://www.learning.gov.ab.ca**
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Lesson 3: Plotting Points

Overview

In this lesson students use ordered pairs to plot and identify points in the first quadrant of the coordinate plane.

Special Requirements

You may gather the following materials for your student to use in this lesson:

- 1-cm grid paper
- ruler

Sharing Time

Students are asked to discuss what they are learning once in Lesson 3—at the end of Activity 3.

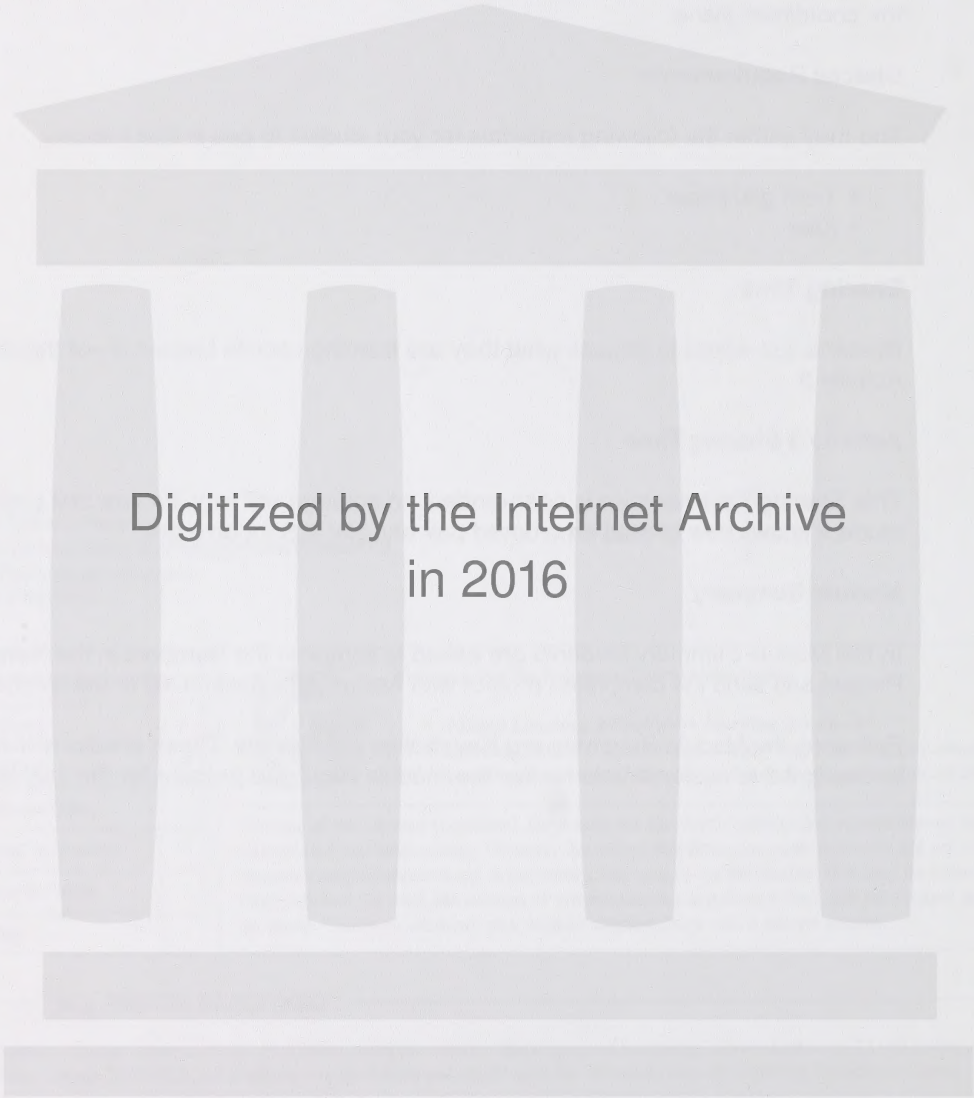
Activity 3 Sharing Time

This Sharing Time exercise is open-ended, so answers will vary. Ensure that your student knows how to read an ordered pair and plot a point on a grid.

Module Summary

In the Module Summary students are asked to complete the Numbers in the News Project and send the completed project with Assignment Booklet 4B to the teacher.

Following the Module Summary are Keystrokes and Review. These special activities can be assigned at a later time to review the module ideas and prepare for the final test.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ASSIGNMENT BOOKLET 4B

Mathematics 5

Module 4: Lesson 3 Assignment and Numbers in the News

Home Instructor's and Student's Comments:

STUDENT FILE NUMBER
(if label is missing or incorrect)

_____

Date Submitted:

_____

Apply Module Label Here

Name

Address

Postal Code

Please verify that preprinted label is for correct course and module.

FOR SCHOOL USE ONLY

Assigned Teacher:

_____

Date Assignment Received:

_____

Grading:

_____

Teacher's Comments

_____

Teacher's Signature

Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.

INSTRUCTIONS FOR SENDING IN THIS DISTANCE LEARNING ASSIGNMENT BOOKLET

When you register for distance learning courses, you are expected to send in Assignment Booklets for corrections regularly. Try to send each Assignment Booklet as soon as you have completed it. Before sending your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

MAILING

1. Postage Regulations

Do **not** enclose letters with Assignment Booklets.

Send all letters in a separate envelope.

2. Postage Rates

Take your Assignment Booklet to the post office and have it weighed. Attach enough postage and seal the envelope. Assignment Booklets will travel faster if correct postage is used and if they are in large envelopes that are no more than two centimetres thick.

FAXING

1. Assignment Booklets may be faxed. Contact your teacher for the fax number.

2. All faxing costs are the responsibility of the sender.

E-MAILING

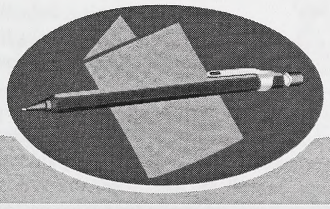
Assignment Booklets may be e-mailed. Contact your teacher for the e-mail address.

Mathematics 5

Module 4

Transformations

Assignment Booklet 4B



Learning Technologies Branch

Alberta LEARNING

FOR TEACHER'S USE ONLY

Summary

	Total Possible Marks	Your Mark
Lesson 3 Assignment	30	
Numbers in the News	10	
	40	

Teacher's Comments

Mathematics 5
Module 4: Transformations
Assignment Booklet 4B
Lesson 3 Assignment and Numbers in the News
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ASSIGNMENT BOOKLET 4B
MATHEMATICS 5—MODULE 4: TRANSFORMATIONS

Your mark on this module will be determined by how well you do your assignments in the Assignment Booklets.

Work slowly and carefully. If you are having difficulties, go back and review the appropriate lessons.

There is one lesson assignment and a Numbers in the News project in this Assignment Booklet. The total of these lesson assignments is 40 marks. The value of each assignment is stated in the left margin.

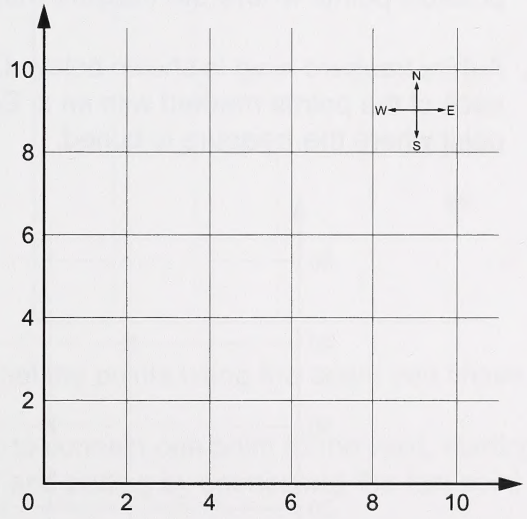
Be sure to proofread each assignment carefully.

Lesson 3 Assignment: Plotting Points

30

1. a. The grid below shows a treasure map. Plot and label a tree at $(2, 6)$, a boulder at $(8, 6)$, and a tree at $(8, 2)$.

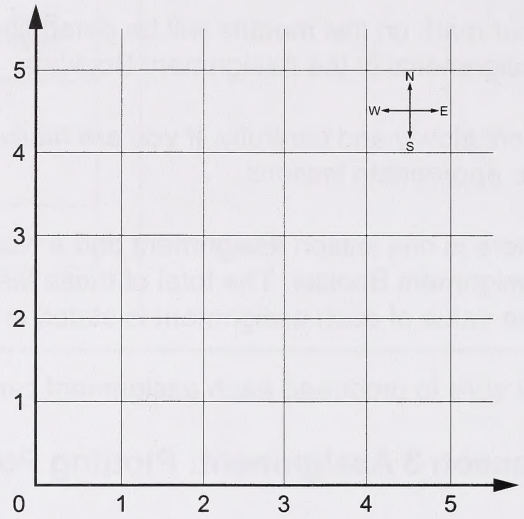
3



b. The treasure is buried at a point that forms a rectangle with the trees and the boulder. Plot and label the point where the treasure is buried.

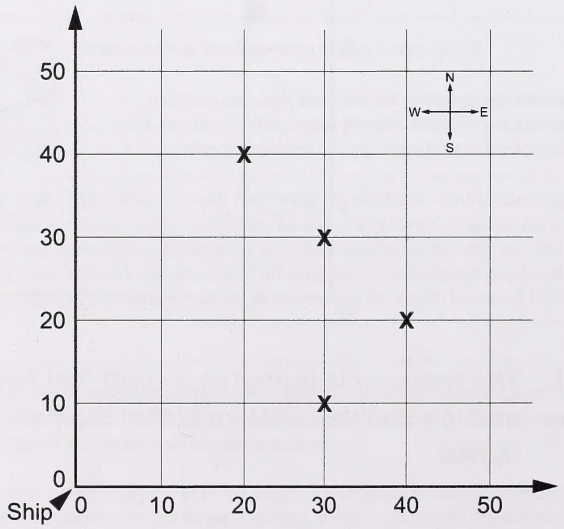
2

(2) **2. a.** The grid below shows another treasure map. Plot and label two trees on it: one at $(1, 2)$ and the other at $(3, 2)$.



(3) **b.** The treasure is buried at a point that forms a triangle with the trees. The point is an equal distance from each tree. Plot and label three possible points where the treasure may be buried.

(4) **3. a.** A third treasure map is shown below. Use ordered pairs to label each of the points marked with an x. Each x represents a possible point where the treasure is buried.



(2) **b.** The ship is located at the origin. The point where the treasure is buried is closest to the ship if the sailors travel along the grid lines. Circle the point where the treasure is buried.

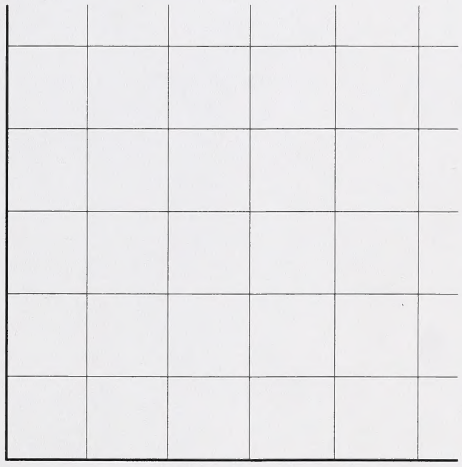
(2) **c.** How far must the sailors carry the treasure back to the ship if they must travel along the grid lines? (The distances are in metres.)

_____

_____

4. Study the following points: $(3, 8)$, $(17, 21)$, $(25, 5)$, $(10, 5)$, and $(1, 23)$.

(4) **a.** Choose and label a scale on the grid below that uses multiples of either 1, 2, 5, or 10 so that when the points are plotted there will be as much room between them as possible.



(5) **b.** Plot and label the points using the scale you chose.

(1) **c.** Use a ruler to connect one point to the next, starting from the first point listed and ending by connecting the last point to the first one.

(2) **d.** Estimate the coordinates of the point where the lines connecting the points cross.

_____

10

Numbers in the News

Scavenger Hunt

Go through the scavenger hunt list for Module 4 to make sure you have clipped at least one sample for each question. Ask your home instructor to check the sample you wish to use, and label each one with the scavenger hunt number it matches. Organize your samples and put them together with any other information required. Submit your project with this Assignment Booklet.

Ask yourself the following questions:

- Is my Numbers in the News project complete? (Have I included all my samples?)
- Do my samples show the ideas clearly? (Are my examples appropriate?)
- Did I take care to be neat when organizing and labelling my work?

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